IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

JUNG-JAE CHO

Serial No.:	10/735,697	Examiner:	LAIOS, MARIA J.
Filed:	16 December 2003	Art Unit:	1795

For: SECONDARY BATTERY AND METHOD OF MANUFACTURING THE SAME

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In accordance with 37 C.F.R. §1.56, and §§1.97 and 1.98 as amended, Applicant cites, describes, and provides copies of the following art references. Under 37 C.F.R. §1.98(a)(2) however, copies of U.S. patent reference(s) are not provided.

U.S. PATENT REFERENCE(S):

- U.S. Patent Publication No. 5,139,898 to Schneider, *et al.*, entitled *LITHIUM-IODINE BATTERY*, published on 18 April 1992.

Folio: P56999
Date: 6/13/08
I.D.: REB/rd

FOREIGN PATENT REFERENCE(S):

- Chinese Patent Publication No. 1241303 to Kozuki, *et al.*, published on 12 January 2000. (English abstract is provided from corresponding International Patent Publication No. 99/18622 to Kozuki *et al.*, entitled *NON-AQUEOUS ELECTROLYTE SECONDARY CELL*, published on 15 April 1999.)
- Chinese Patent Publication No. 1166062 to Morishita *et al.*, entitled *BATTERY*, published on 26 November 1997.
- Japanese Patent Publication No. 08-153510 to Komatsu *et al.*, entitled *EXPLOSION-PROOF SEALING PLATE FOR THIN BATTERY*, published on 11 June 1996.

OTHER DOCUMENT:

- *Registration Determination Certificate* from the Chinese Patent Office issued in Applicant's corresponding Chinese Patent Application No. 200310123917.2 dated 30 April 2008.

DISCUSSION

As written in the Registration Determination Certificate issued by the Chinese Patent Office on the 30 April 2008 in applicant's corresponding Chinese Patent Application corresponding to applicant's above-captioned U.S. Patent Application, **Scheider, *et al.* US'898** discloses that an improved lithium-iodine battery is resistant to failure caused by iodine vapor within the battery. The entire interface of the current collector with the lithium anode is isolated from other battery components by a rigid, electrical-insulating sleeve.

Kozuki, *et al.* WO'622 (for CN'303) discloses that a non-aqueous electric secondary battery especially of a large-size, comprising a highly reliable collector terminal which has an excellent electrical conductivity and hardly break when a nut is fastened with an excessive torque to the external terminal of the collector terminal. The external terminal of the collector terminal is made of a different metal from that of the portion connected to a lead plate led from electrode plates, and these are integrated by solid phase welding or vacuum brazing. Effective examples of solid phase welding of this case are solid phase diffusion welding, explosion welding and friction welding.

Morishita, *et al.* CN'062 discloses that a cell has an outer can made from either aluminum or an aluminum alloy, and a lead plate for current-utilization. The lead plate for current-utilization is welded to the outer surface of the outer can and further welded to a lead plate for connection which is connected with the protective circuit of the cell. This construction makes it possible to avoid directly connecting the outer can with the lead plate for connection. Consequently, the lead plate for connection can be resistance-welded, so that the protective circuit is prevented from being electrified. As a result, the reliability of the protective circuit is improved, as compared with the case where the lead plate for connection is laser-welded.

Komatsu, *et al.* JP'510 discloses that this explosion-proof sealing plate comprises a flexible metallic explosion-proof valve 1, an insulating ring 2, a metallic effective plate 3, a metallic terminal strip 5 obtained by the curving of a ribbon-shaped metallic plate into a projecting shape, and a metallic cap terminal 6. The operating pressure of the sealing plate can be adjusted by means of the strength of fusion between the projecting part of the terminal strip 5 and the explosion- proof valve 1. Also, the operating pressure of the explosion-proof sealing plate can be adjusted by means of the thickness of a current shutoff plate 8, the thickness of the explosion-proof valve, and the area of fusion. The sealing plate is made to conduct by welding one end of the terminal strip 5 to a lead plate taken out of an electrode, and then welding the projecting part of the strip 5 to the valve 1 so that the projecting part is in contact with the terminal 6. If the internal pressure of the battery builds up as a result of the generation of gas due to the short circuit, overcharge, or reverse charge, etc., of the battery, the gas inside the battery lifts the center of the valve 1 from an opening 5a in the projecting

part of the strip 5, causing rupture of the welded portion S and disconnecting the strip 5 from the valve 1 so that current is interrupted.

Pursuant to 37 CFR § 1.97(d), the undersigned attorney hereby certifies that each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign patent application not more than three(3) months prior to the filing of the statement.

The citation of the foregoing references is not intended to constitute an assertion that other or more relevant art does not exist. Accordingly, the Examiner is requested to make a wide-ranging and thorough search of the relevant art.

No fee is incurred by this Statement.

Respectfully submitted,

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